Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Claim Rejections - 35 USC § 101

Claims 7 and 8 stand rejected as being directed to non-statutory subject matter. By way of the foregoing amendments, claims 7 and 8 have been amended to remove any issue as to the alleged non-statutory subject matter and therefore the rejection is moot.

Accordingly, withdrawal of the rejection of claims 7 and 8 is respectfully requested.

Claim Rejections - 35 USC § 102

Independent claims 1, 7 and 8 have been amended herein and now recite that the x-ray device is calibrated in a medical navigation system to obtain registering information enabling an x-ray image acquired by the x-ray device in anyone of a plurality of different positions to be registered in the navigation system, and the calibrated x-ray device is used to produce a plurality of x-ray images of the patient from different positions. By calibrating the x-ray device in advance of obtaining images of the patient, it is possible to register the x-ray images in the navigation workspace as soon as they are produced. Thus, it is no longer necessary to individually and separately register each x-ray image to enable navigation.[1]

Seeley describes a fluoroscopic tracking and visualization system that employs a C-arm x-ray fluoroscope and a tracking system. The C-arm fluoroscope may be a relatively low-cost fluoroscope[2], wherein the structure of the apparatus may be somewhat flexible and subject to bending, deflection or sagging as the source and camera move to different positions. The C-arm also may have other forms of dimensional variation or looseness that contribute to variations and non-repeatability of the relative disposition and alignment of the source and camera with respect to each other, and with respect to the patient.[3] To address this variability in the C-arm, *Seeley* uses tracking elements in conjunction with a camera calibration fixture to provide fluoroscopic images of enhanced accuracy. The calibration fixture includes markers that are imaged in each fluoroscopic shot and serve to characterize the imaging geometry.[4] In

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[1] See, e.g., page 3, lines 1-23 of the application.

[2] Column 9, lines 45-48 of *Seeley*.

[3] Column 7, line 64-column 8, line 8 of *Seeley*.

[4] Column 9, lines. 12-25, column 11, lines 61-63 of *Seeley*.

other words, the x-ray device of *Seeley* is not calibrated in advance to obtaining images of the patient. *Seeley* has not been found to teach or suggest calibrating an x-ray device in a medical navigation system to obtain registering information enabling an x-ray image acquired by the x-ray device in anyone of a plurality of different positions to be registered in the navigation system, and using the calibrated x-ray device to produce a plurality of x-ray images of the patient from different positions, as recited in claims 1, 7 and 8.

The remaining claims depend from claim 1 and, thus, can be distinguished from *Seeley* for at least the same reasons.

Accordingly, withdrawal of the rejection of claims 1-8 is respectfully requested.

New Claims 9-11

New claims 9-11 are submitted for favorable examination in view of the forgoing comments regarding the applied references.

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,
RENNER, OTTO, BOISSELLE & SKLAR, LLP

By _____
Kenneth W. Fafrak, Reg. No. 50,689

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
(216) 621-1113

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper or thing referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 2/21/2006

Christine Arndt

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